

OCT 02 2003

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	09/633,633
				Filing Date	August 7, 2000
				First Named Inventor	Brown et al
				Art Unit	2124
				Examiner Name	Chavis
				Attorney Docket Number	ROYG-1-1001
Sheet	1	of	4		

[illegible][illegible]

Examiner Signature	<i>Chris G. L.</i>	Date Considered	10-29-03
-----------------------	--------------------	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known	
		Application Number	09/633,633
		Filing Date	August 7, 2000
		First Named Inventor	Brown et al.
		Group Art Unit	2124
		Examiner Name	Chavis
Sheet 2 of 4	Attorney Docket Number	ROYG-1-1001	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	059	BRADLEY BARGEN and PETER DONNELLY; Inside Direct X – In Depth Techniques for Developing High-Performance Multimedia Applications; 1988; Chapters 1, 18, 19, 20, and 22-27; Microsoft Press; U.S.	
	060	PETER KOVACH; Inside Direct3D – The Definitive Guide for Real-Time 3D Power and Performance for Microsoft Windows; 2000; Chapters 1, 7, and 15; Microsoft Press; U.S.	
	061	M. FARSI and M. BARBOSA; CANopen Implementation - Applications to Industrial Networks; 2000; Chapters 1, 2 and 3; Research Studies Press Ltd.; England and U.S.	
	062	WOLFHARD LAWRENZ; CAN System Engineering – From Theory to Practical Applications; 1997; Chapters 1, 2.1, 2.2, 3.2 and 4.1; Springer-Verlag New York, Inc.; U.S.	
	063	ALLEN-BRADLEY; CNCnet Software Library; October, 1992; Publication 8000-6.1.1; U.S.	
	064	ROBERT BOSCH GmbH; CAN Specification; September, 1991; Version 2.0.	
	065	SISCO, INC.; Overview and Introduction to the Manufacturing Message Specification (MMS); 1994-1995; Revision 2; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
	066	ISO-9506-1 Industrial Automation Systems—Manufacturing Message Specification—Part 1: Service definition; August, 2000; pp. i-22; ISO/IEC; Switzerland.	
	067	ISO-9506-2 Industrial Automation Systems—Manufacturing Message Specification—Part 2: Protocol specification; August, 2000; pp. i-6; ISO/IEC; Switzerland.	
	068	SISCO, INC.; MMS-EASE; January, 1996; Systems Integration Specialists Company, Inc.; Sterling Heights, Michigan, U.S.	
	069	ANSI/EIA-484-A Electrical and Mechanical Interface Characteristics and Line Control Protocol Using Communication Control Characters for Serial Data Link Between a Direct Numerical Control System and Numerical Control Equipment Employing Asynchronous Full Duplex Transmission; June, 1995; Electronic Industries Association; U.S.	

RECEIVED

OCT 08 2003

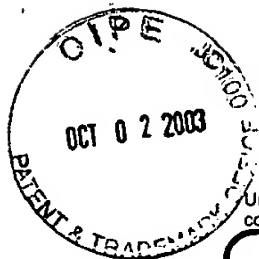
Technology Center 2100

Examiner Signature		Date Considered	10-29-03
--------------------	--	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08B (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/633,633		
		Filing Date	August 7, 2000		
		First Named Inventor	Brown et al.		
		Group Art Unit	2124		
		Examiner Name	Chavis		
Sheet	3	of	4	Attorney Docket Number	ROYG-1-1001

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
AP	070	ISO/IEC 7498-1 Information Technology—Open Systems Interconnection-Basic Reference Model: The Basic Model; November, 1994; U.S.	
AP	071	ISO/IEC 7498-3 Information Technology—Open Systems Interconnection-Basic Reference Model: Naming and Addressing; April, 1997; U.S.	
AP	072	TODD J. SCHUETT; The Benefits and Data Bottlenecks of High Speed Milling; August, 1995; Conference Paper Presented at Southeastern Michigan Chapter American Mold Builders Association; Creative Technology Corporation; U.S.	
AP	073	TODD J. SCHUETT; "The Ultimate DNC; Direct CNC Networking (DCN)"; Modern Machine Shop; January, 1996; Creative Technology Corporation; U.S.	
AP	074	TODD J. SCHUETT; Advanced Controls for High Speed Milling; Conference Paper Presented at the SME "High Speed Machining"; May 7-8, 1996; Creative Technology Corporation; U.S.	
AP	075	LEITAO, MACHADO & LOPES; "A Manufacturing Cell Integration Solution"; Paper Developed at CCP as a Part of the ESPRIT 5629 Project; October, 1995.	
AP	076	MITSUBISHI ELECTRIC; Mitsubishi Electric Advance: Programmable Logic Controllers Edition; September, 1996; Vol. 76; Mitsubishi Electric Corporation; Tokyo.	
AP	077	FARSI, M.; "Flexible and Reliable Robotics Cells in Factory Automation"; Proceedings of the IEEE International Conference on Systems, Man and Cybernetics, France; 1993; pp. 520-525.	
AP	078	CHU & WANG; "Development of a Practical SFC System for CNC Machine Shop"; International Conference on Data and Knowledge Systems for Manufacturing and Engineering; May 1994; pp. 362-367, Vol. 1; pp. xx+745, Vol. 2; Chinese Univ.; Hong Kong.	
AP	079	FARSI, M.; "Device Communication for Flexible Manufacturing:-A New Concept"; Ninth International Conference on System Engineering, U.K.; 1994; pp. 328-334.	
AP	080	FARSI, M.; "A Production Cell Communication Model in Factory Automation Using the Controller Area Network"; Proceedings of XII International Conference on Systems Science, Poland; 1995; pp. 90-95.	

RECEIVED

OCT 08 2003

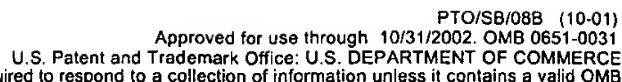
Technology Center 2100

Examiner Signature	Chavis, G. d.	Date Considered	10-29-03
--------------------	---------------	-----------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Substitute for form 1449B/PTO				<div>Complete if Known</div> <div> <div>Application Number</div> <div>09/633,633</div> </div> <div> <div>Filing Date</div> <div>August 7, 2000</div> </div> <div> <div>First Named Inventor</div> <div>Brown et al.</div> </div> <div> <div>Group Art Unit</div> <div>2124</div> </div> <div> <div>Examiner Name</div> <div>Chavis</div> </div> <div> <div>Attorney Docket Number</div> <div>ROYG-1-1001</div> </div>	
<div>INFORMATION DISCLOSURE</div> <div>STATEMENT BY APPLICANT</div> <div>(use as many sheets as necessary)</div>					
Sheet	4	of	4		

[illegible]

RECEIVED
OCT 08 2003
Technology Center 2100

Examiner Signature	<i>Chris G. G.</i>	Date Considered	10-29-03
-----------------------	--------------------	--------------------	----------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

FORM PTO-1449

DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
ROYG-1-1001APPLICATION NO.
09/633,633

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
BROWN et al.

2

FILING DATE
August 7, 2000GROUP ART UNIT
2762 2124

U.S. PATENT DOCUMENTS

Not Provided

"

"

"

"

"

"

"

"

"

"

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	U1	5,691,897	11/25/97	Brown et al.	364	167:01	
	U2	5,608,894	03/04/97	Kawakami et al.	395	500	
	U3	5,604,843	02/18/97	Shaw et al.	395	101	
	U4	5,491,813	02/13/96	Bondy et al.	395	500	
	U5	5,453,933	09/26/95	Wright et al.	364	474:23	
	U6	5,390,330	02/14/95	Talati	395	703	
	U7	5,247,650	09/21/93	Judd et al.	395	500	
	U8	5,126,932	06/30/92	Wolfson et al.	395	200:32	
	U9	5,175,817	12/29/92	Adams et al.	395		
	U10	5,245,703	09/14/93	Hubert	395		
	U11	4,937,737	06/26/90	Schwane et al.	364		

FOREIGN PATENT DOCUMENTS

Cited in Paper #5

"

"

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	F1	0275826-A1	07/27/88	European Pat. Off.	G05B	19/00		
	F2	0442676-A2	08/21/91	European Pat. Off.	G06F	0/44		
	F3	WO 9507504	03/16/95	WIPO	G05B	19/414		
	F4							
	F5							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

Incomplete - No Author
or source. Also, not
provided

"

"

	O1	WOSA-Backgrounder: Delivering Enterprise Services to the Windows-based Desktop, July-1993, Microsoft Development Library.
	O2	WOSA-INSIDE-WINDOWS-95, pp. 348-351
	O3	Software Products for Industrial Automation, ICONICS-WEB-3.0-Product Brochure, Trihedral/Engineering Ltd. (1994)

EXAMINER

Chris, J. P.

DATE CONSIDERED

6-26-03

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
ROYG-1-1001APPLICATION NO.
09/633,633

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
BROWN et al.FILING DATE
August 7, 2000

GROUP ART UNIT

2762 2124

U.S. PATENT DOCUMENTS

Not Provided

h

u

u

u

u

u

u

u

u

u

u

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	U12	5,095,445	03/10/92	Sekiguchi	364		
	U13	4,531,182	07/23/85	Hyatt	364	131	
	U14	3,673,455	6/1/972	Dewey	317	29-R	
	U15	4,589,074	5/1/986	Thomas et al.	364	483	
	U16	4,672,555	6/1/987	Hart et al.	364	483	
	U17	4,695,792	9/1/987	Roy	324	83-D	
	U18	4,709,339	11/1/987	Fernandes	364	492	
	U19	4,983,955	1/1/991	Ham, Jr. et al.	340	664	
	U20	5,182,547	1/1/993	Griffith	340	664	
	U21	5,224,006	6/1/993	MacKenzie et al.	361	45	
	U22	5,224,054	6/1/993	Wallis	364	483	

FO8/1993REIGN PATENT DOCUMENTS364

		DOCUMENT NUMBER	DATE8	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	F							
	F							
	F							
	F							
	F							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete and
not provided

u

u

	O4	The Complete Computer-Based Automation Tool (IGSS)-Seven Technologies A/S.
	O5	Oregon Micro Systems Product Guide?
	O6	AIMAX WIN Product Brochure; T-A Engineering Co., Inc.

EXAMINER

Chen, J. P.

DATE CONSIDERED

6-26-03

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
ROYG-1-1001APPLICATION NO.
09/633,633

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
BROWN et al.FILING DATE
August 7, 2000GROUP ART UNIT
2762 2124

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
Not Provided	U23	5,233,538	8/1993	Wallis	364	483	
"	U24	5,343,404	8/1994	Girgis	364	484	
"	U25	5,414,635	5/1995	Ohta	364	481	
"	U26	5,487,016	1/1996	Elms	364	484	
"	U27	5,490,086	2/1996	Leone et al.	364	492	
"	U28	5,587,917	12/1996	Elms	364	487	
	U29						
	U30						
	U31						
	U32						
	U33						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	F							
	F							
	F							
	F							
	F							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete and not provided	O7		XANALOG-Model-NL-SIM-Product-Brochure, XANALOG
"	O8		ExperTune-PID-Tuning Software, Gerry-Engineering, Software
"	O9		P.MAC-Product-Catalog, P-43

EXAMINER

Chen, J. Q.

DATE CONSIDERED

6-26-03

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449 (REV. 7-80)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ROYG-1-1001	APPLICATION NO. 09/633,633
INFORMATION DISCLOSURE STATEMENT <i>(Use several sheets if necessary)</i>		APPLICANTS BROWN et al.	
		FILING DATE August 7, 2000	GROUP ART UNIT 2762 2124

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	U34						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	F							
	F							
	F							
	F							
	F							
	F							

OTHER PRIOR ART *(Including Author, Title, Date, Pertinent Pages, Etc.)*

<i>incomplete and not provided</i> " " " "		10	Paragon TNT Product Brochure, Intec Controls Corp.
		11	Aerotech Motion Control Product Guide, pp-233-234
		12	OpenBatch Product Brief, PID, Inc.

EXAMINER

Chen, G.P.

DATE CONSIDERED

6-26-03

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
ROYG-1-1001APPLICATION NO.
09/633,633

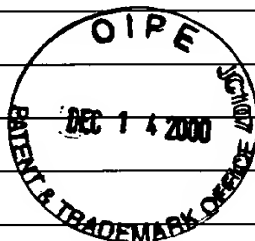
INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
BROWN et al.FILING DATE
August 7, 2000GROUP ART UNIT
2762 2/24

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						



FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	F							
	F							
	F							
	F							
	F							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

incomplete and not provided	13	PG/DSP-Series-Motion-Controller-C-Programming-Guide.
n	14	EX-Product-Brochure-Intellution-(1994) ==>
n	15	Precision Motion Controls Product Guide, P. 17 ==>

EXAMINER

Chang, G. P.

DATE CONSIDERED

6-26-03

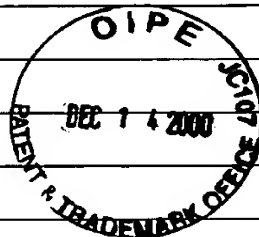
* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
ROYG-1-1001APPLICATION NO.
09/633,633**INFORMATION DISCLOSURE STATEMENT**

(Use several sheets if necessary)

APPLICANTS
BROWN et al.FILING DATE
August 7, 2000GROUP ART UNIT
2762 2124**U.S. PATENT DOCUMENTS**

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						
	U						



RECEIVED
DEC 20 2 100
TECH CENTER 2700

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	F							
	F							
	F							
	F							
	F							

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

is complete and not provided	16	Compumotor-Digiplan.1993-1994-catalog, pp. 10-11.
	17	
	18	

EXAMINER

Chen, G. P.

DATE CONSIDERED

6-26-03

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).